Amendments to the Claims:

1. (Canceled) A protein composed of SEQ ID No. 1 characterized by having a nature to interact with proteasome.

2. (Canceled) A protein composed of SEQ ID No. 1 or SEQ ID No. 2 characterized by having a nature to interact with a polyubiquitin chain.

3. (Canceled) A therapeutic agent for disuse muscular atrophy characterized in that an expression or a function of a protein composed of SEQ ID No. 1 or SEQ ID No. 2 is inhibited.

4. (Canceled) A therapeutic agent for disuse muscular atrophy characterized in that an expression or a function of a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome is inhibited.

5. (Canceled) A therapeutic agent for disuse muscular atrophy characterized in that an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain is inhibited.

6. (Canceled) A method of producing a therapeutic agent for disuse muscular atrophy comprising the step of interacting a protein composed of SEQ ID No. 1 and proteasome.

7. (Canceled) A method for screening therapeutic agents for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

8. (Canceled) A marker for disease diagnosis for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

9. (Canceled) A method for evaluating the risk of onset of disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

10. (Canceled) Use of an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain for producing a therapeutic agent for disuse muscular atrophy.

11. (Canceled) A method for screening therapeutic agents for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.

12. (Canceled) A marker for disease diagnosis for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.

13. (Canceled) A method for evaluating the risk of onset of disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.

14. (Canceled). A protein composed of SEQ ID No. 1 characterized by having a nature to interact with at least one of the group consisting of proteasome and a polyubiquitin chain.

15. (Canceled) The protein defined in claim 14 wherein the nature of interaction is an inhibition of an expression or function of said protein composed of SEQ ID No. 1.

16. (Canceled) A method of producing a therapeutic agent for disuse muscular atrophy comprising the step of interacting said protein defined in claim 14 with one of the group consisting of proteasome and a polyubiquitin chain.

17. (Canceled) A method of producing a marker for disuse muscular atrophy comprising the step of interacting said protein defined in claim 14 with one of the group consisting of proteasome and a polyubiquitin chain.

18. (Canceled) A method for disease diagnosis for disuse muscular atrophy comprising the step of interacting said protein defined in claim 14 with one of the group consisting of proteasome and a polyubiquitin chain.

19. (Previously Presented) A method for screening therapeutic agents for disuse muscular atrophy comprising the step of interacting a protein composed of SEQ ID No. 1 with a polyubiquitin chain.

20. (Canceled) A method for evaluating the risk of the onset of disuse muscular atrophy comprising the step of interacting said protein defined in claim 14 with one of the group consisting of proteasome and a polyubiquitin chain.

21. (Previously Presented) The method defined in claim 19, further comprising the steps of carrying out said interaction step in the presence of a candidate therapeutic agent, and determining the affect of the candidate therapeutic agent on a binding strength between the protein composed of SEQ ID No. 1 and the polyubiquitin chain.

22. (Currently Amended) The method defined in claim 21 ~~20~~, wherein said steps are carried out by way of an enzyme-linked immunosorbent assay, and said affect on said binding strength is determined by color development on a substrate.

23. (Currently Amended) The method defined in claim 21 ~~20~~, wherein said affect on binding strength is determined by direct observation of at least one molecule of the combination of the [[of]] SEQ ID No. 1 and the polyubiquitin chain.

24. (Previously Presented) The method defined in claim 23, wherein said direct observation is conducted by one of NMR spectroscopy, X-ray crystal analysis, electron microscopy and surface plasmon resonance.